Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0203726A: Adv Field Artillery Tactical Data System

BA 7: Operational Systems Development

| COST (\$ in Millions) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total | FY 2013 | FY 2014 | FY 2015 | FY 2016 | Cost To Complete | Total Cost |
|--|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|---------------------|------------|
| Total Program Element | 29.127 | 24.622 | 29.546 | - | 29.546 | 24.448 | 24.593 | 24.444 | 24.655 | Continuing | Continuing |
| 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS) | 17.687 | 12.835 | 18.039 | - | 18.039 | 18.722 | 18.886 | 18.711 | 18.827 | Continuing | Continuing |
| F19: JADOCS | 11.440 | 11.787 | 11.507 | - | 11.507 | 5.726 | 5.707 | 5.733 | 5.828 | Continuing | Continuing |

Note

The increase in the FY12 funding of \$8.000 million is to fund requirements for AFATDS Increment II Capability Development Document (CDD).

The increase in the FY12 funding of \$5.890 million is to fund upgrade and sustain JADOCS (273726.F19)

A. Mission Description and Budget Item Justification

The Advanced Field Artillery Tactical Data System (AFATDS) automates fire support planning and coordination for the Army, Navy, and Marine Corps. AFATDS automates the planning, coordinating and controlling of all fire support assets in the Joint battlespace (field artillery, mortars, close air support, naval gunfire, attack helicopters, and offensive electronic warfare) from Echelons Above Corps to Battery or Platoon in support of all levels of conflict. As a result of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF), AFATDS has implemented precision fires capabilities in new/improved munitions such as Multiple Launch Rocket System (MLRS) Unitary Vertical Attack, Excalibur, Smart and 155 Bonus. Additional implemented capabilities include automatic conduct of Unit Fratricide Avoidance Checks and Collateral Damage Avoidance. AFATDS will interoperate with the other Army Battle Command Systems, current and future Army, Navy and Air Force Command and Control weapon systems, and the German, French, British, and Italian fire support systems. The system is composed of common hardware/software employed in varying configurations at different operational facilities (or nodes) and unique system software interconnected by tactical communications in the form of a software-driven, automated network. The system is currently fielding non-developmental, rugged common hardware, running the Windows Operating System. The total force will be fielded a Windows based platform by fiscal year 2013.

Joint Automated Deep Operations Coordination System (JADOCS) is a Joint, Interagency, and Multinational (JIM) Targeting, Mission Management, and Common Operational Picture (COP) Windows based software suite which functions as a complementary system to the AFATDS. JADOCS provides integration and synergy between multiple Command & Control (C2) systems of the uniformed services, and Joint and combined elements involved in the targeting process and performs coordination and calculates collateral damage. JADOCS Mission Managers support this coordination amongst Warfighter functional areas to rapidly execute critical missions. JADOCS is a component of the Integrated Fires Family of Systems (FOS) and complementary to the Army Battle Command Systems (ABCS) System of Systems (SoS).

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army | | DATE: February 2011 |
|--|---|---------------------|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | |
| 2040: Research, Development, Test & Evaluation, Army | PE 0203726A: Adv Field Artillery Tactical Data System | |
| BA 7: Operational Systems Development | | |

| B. Program Change Summary (\$ in Millions) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
|---|---------|---------|---------------------|-------------|---------------|
| Previous President's Budget | 29.174 | 24.622 | 16.497 | - | 16.497 |
| Current President's Budget | 29.127 | 24.622 | 29.546 | - | 29.546 |
| Total Adjustments | -0.047 | - | 13.049 | - | 13.049 |
| Congressional General Reductions | | - | | | |
| Congressional Directed Reductions | | - | | | |
| Congressional Rescissions | - | - | | | |
| Congressional Adds | | - | | | |
| Congressional Directed Transfers | | - | | | |
| Reprogrammings | - | - | | | |
| SBIR/STTR Transfer | - | - | | | |
| Adjustments to Budget Years | - | - | 8.000 | - | 8.000 |
| Other Adjustments 1 | - | - | 5.890 | - | 5.890 |
| Other Adjustments 2 | 0.357 | - | -0.641 | - | -0.641 |
| Other Adjustments 3 | -0.404 | - | -0.200 | - | -0.200 |

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DATF: February 2011

| Exhibit it EA, itb i all i lojcot dast | inoution. I | 2012 / Willy | | | | | | | DAIL: 1 CO | dary 2011 | | |
|--|-----------------|----------------|------------------|---------|-----------------------------------|---------|---------|---|------------|------------|------------|--|
| APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test BA 7: Operational Systems Develop | & Evaluation | n, Army | | | IOMENCLAT 6A: <i>Adv Field</i> | | | PROJECT a 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS) | | | | |
| COST (\$ in Millions) | FY 2012 Base | FY 2012 OCO | FY 2012 Total | FY 2013 | FY 2014 | FY 2015 | FY 2016 | Cost To Complete | Total Cost | | | |
| 322: Adv Fa Tac Data Sys/Eff Cntrl Sys (AFATDS/ECS) | 17.687 | 12.835 | 18.039 | - | 18.039 | 18.722 | 18.886 | 18.711 | 18.827 | Continuing | Continuing | |
| Quantity of RDT&E Articles | | | | | | | | | | | | |

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army

The Advanced Field Artillery Tactical Data System (AFATDS) automates fire support planning and coordination for the Army, Navy, and Marine Corps. AFATDS automates the planning, coordinating and controlling of all fire support assets in the Joint battlespace (field artillery, mortars, close air support, naval gunfire, attack helicopters, and offensive electronic warfare) from Echelons Above Corps to Battery or Platoon in support of all levels of conflict. As a result of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF), AFATDS has implemented precision fires capabilities in new/improved munitions such as Multiple Launch Rocket System (MLRS) Unitary Vertical Attack, Excalibur, Smart and 155 Bonus. Additional implemented capabilities include automatic conduct of Unit Fratricide Avoidance Checks and Collateral Damage Avoidance. AFATDS will interoperate with the other Army Battle Command Systems, current and future Army, Navy and Air Force Command and Control weapon systems, and the German, French, British, and Italian fire support systems. The system is composed of common hardware/software employed in varying configurations at different operational facilities (or nodes) and unique system software interconnected by tactical communications in the form of a software-driven, automated network. The system is currently fielding non-developmental, rugged common hardware, running the Windows Operating System. The total force will be fielded a Windows based platform by fiscal year 2013. The increase in the FY12 - 16 funding of \$8.000 million per year is to fund requirements for AFATDS Increment II Capability Development Document (CDD).

| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
|---|---------|---------|-----------------|----------------|------------------|
| Title: Program Support Costs for AFATDS software development efforts | 1.025 | 1.087 | 1.244 | - | 1.244 |
| Articles: | 0 | 0 | | | |
| Description: Provide program support for AFATDS software development efforts for Versions 6.6, 6.7, 6.8 and 6.9. | | | | | |
| FY 2010 Accomplishments: Funded program support for AFATDS software development efforts | | | | | |
| FY 2011 Plans: Continue program support for AFATDS software development efforts | | | | | |
| FY 2012 Base Plans: Future program support for AFATDS software development efforts | | | | | |
| Title: AFATDS software development efforts costs | 11.575 | 8.748 | 13.235 | - | 13.235 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2012 Army | | | | ATE: Febru | ary 2011 | |
|--|--|-----------|-------------------------------------|-----------------|----------------|------------------|
| APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development | R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tactical System | al Data 3 | PROJECT 322: Adv Fa AFATDS/EC | - | s/Eff Cntrl S | Sys |
| B. Accomplishments/Planned Programs (\$ in Millions, Article | e Quantities in Each) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
| | Articles: | | 0 0 |) | | |
| Description: Complete development of Versions 6.7 and 6.8. Ir | ntitate development of Version 6.9 | | | | | |
| FY 2010 Accomplishments: Continued AFATDS software development efforts for Version 6.7 | and Version 6.8. | | | | | |
| FY 2011 Plans: Complete AFATDS software development versions 6.7 and 6.8. | | | | | | |
| FY 2012 Base Plans: Initiate AFATDS software Version 6.9 development effort. | | | | | | |
| Title: Voice Recognition/Technology Insertion | Articles: | 2.00 | 0 - | - | - | - |
| Description: Voice Recognition/Technology Insertion | | | | | | |
| FY 2010 Accomplishments: | | | | | | |
| Completed Voice Recognition/Technology Insertion. | | | | | | |
| Title: Testing | Articles: | 2.80 | 3.000 0 0 | 3.560 | - | 3.560 |
| Description: Conduct and support test activities | | | | | | |
| FY 2010 Accomplishments: Conducted and supported AFATDS test activities. | | | | | | |
| FY 2011 Plans: Conduct and support AFATDS test activities. | | | | | | |
| FY 2012 Base Plans: Conduct and support AFATDS test activities. | | | | | | |
| Title: Small Business Innovative Research/Small Business Tech | nology transfer program Articles: | 0.28 | 57 - 0 | - | - | - |
| Description: Small Business Innovative Research/Small Busine | ss Technology transfer program | | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2012 Army | | | DATE: February 2011 |
|---|--|-------------|------------------------------|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | PROJECT | |
| 2040: Research, Development, Test & Evaluation, Army | PE 0203726A: Adv Field Artillery Tactical Data | 322: Adv Fa | a Tac Data Sys/Eff Cntrl Sys |
| BA 7: Operational Systems Development | System | (AFATDS/E | CS) |

| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
|--|---------|---------|-----------------|----------------|------------------|
| FY 2010 Accomplishments: Supported Small Business Innovative Research/Small Business Technology transfer program | | | | | |
| Accomplishments/Planned Programs Subtotals | 17.687 | 12.835 | 18.039 | - | 18.039 |

C. Other Program Funding Summary (\$ in Millions)

| | | | FY 2012 | FY 2012 | FY 2012 | | | | | Cost To | |
|-------------------------------|---------|---------|-------------|---------|--------------|---------|---------|---------|---------|------------|-------------------|
| <u>Line Item</u> | FY 2010 | FY 2011 | Base | OCO | <u>Total</u> | FY 2013 | FY 2014 | FY 2015 | FY 2016 | Complete | Total Cost |
| • B28600: ADV FA TAC DATA SYS | 1.536 | 4.240 | 0.337 | 5.782 | 6.119 | | 0.232 | | | Continuing | Continuing |
| • B28620: MOD OF IN-SVC | 29.175 | 35.608 | 34.556 | | 34.556 | | 17.194 | 10.148 | 10.053 | Continuing | Continuing |
| EQUIP, AFATDS | | | | | | | | | | | |

D. Acquisition Strategy

AFATDS began fielding in 1996, with the original AFATDS Version 96 Materiel Release. It has been updated with subsequent releases reflecting the Spiral development strategy of the program. Full Materiel Release of AFATDS 6.5.0.1 (Windows version) was achieved in Aug 2009. Full Materiel Release of AFATDS 6.6.0 (Windows version) was achieved in June 2010. AFATDS 6.7 is nearing completion and will be fielded in FY2011.

Development efforts will continue to enhance Command and Control for precision weapons, Excalibur Height above Ellipsoid (HAE), Active Weapon Target pairing and Unexploded Ordnance (UXO) area computations. It will also provide backward interoperability to Pass and Subscribe Services (PASS) and AFATDS XML Engine (AXE) for Software Block 2 (SWB2) to enable connection to SWB1/1+ versions.

AFATDS Capability Development Document (CDD) is under development and currently going through Joint Requirements Oversight Council (JROC) review. JROC approval is expected in Fiscal Year 2011. AFATDS also continues to develop to Battle Command Capability Set requirements.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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| Exhibit R-3, RDT&E Pro | ject Cost | Analysis: PB 2012 A | Army | | | | | | | DATI | E: Februar | y 2011 | |
|--|------------------------------|--|------------------------------|-------|---------------|-----------------------|---------------|--------------|---------------|------------------------------|---------------------|--------------|--------------------------------|
| APPROPRIATION/BUDO 2040: <i>Research, Develop</i> BA 7: <i>Operational Systen</i> | ment, Tes | t & Evaluation, Army | | | 0203726A: | MENCLATI Adv Field | | actical Data | | ECT Adv Fa Tac DS/ECS) | Data Sys/E | Eff Cntrl Sy | rs |
| Management Services (| \$ in Millio | ens) | | FY 2 | 2011 | FY 2012 Base | | FY 2 | | FY 2012 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Program Management | SS/FP | PM Battle Command (BC):Ft. Monmouth/ APG, MD | 14.307 | 1.012 | | 1.164 | | - | | 1.164 | Continuing | Continuing | Continuin |
| SBIR/STTR | SS/FP | Ft. Monmouth, NJ:Ft. Monmouth, NJ | - | - | | - | | - | | - | Continuing | Continuing | Continuin |
| | | Subtotal | 14.307 | 1.012 | | 1.164 | | - | | 1.164 | | | |
| Product Development (| \$ in Millio | ns) | | FY 2 | 2011 | FY 2 Bas | - | FY 2 OC | | FY 2012 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To | Total Cost | Target Value of Contract |
| Software Development | SS/CPAF | Raytheon Systems Corp.:Ft. Wayne, IN | 282.803 | 8.748 | | 13.235 | | - | | 13.235 | Continuing | Continuing | Continuing |
| | | Subtotal | 282.803 | 8.748 | | 13.235 | | - | | 13.235 | | | |
| Support (\$ in Millions) | | | | FY 2 | 2011 | FY 2 Bas | | FY 2 | | FY 2012 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Information Assurance | C/FP | CSC:Eatontown, NJ | 0.195 | 0.075 | | 0.080 | | - | | 0.080 | Continuing | Continuing | Continuing |
| | | Subtotal | 0.195 | 0.075 | | 0.080 | | - | | 0.080 | | | |
| Test and Evaluation (\$ i | n Millions | s) | | FY 2 | 2011 | FY 2 Bas | | FY 2 | | FY 2012 Total | | | |
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To | Total Cost | Target Value of Contract |
| Test Support | C/FP | Titan and various contractors:Various Locations | 0.195 | 1.950 | | 2.360 | | - | | 2.360 | | Continuing | Continuin |
| Limited User Test/Government Confidence Demo | C/FP | Army Test & Evaluation Command | 11.052 | 1.050 | | 1.200 | | - | | 1.200 | Continuing | Continuing | Continuin |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army | | | DATE: February 2011 |
|--|--|-------------|------------------------------|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | PROJECT | |
| 2040: Research, Development, Test & Evaluation, Army | PE 0203726A: Adv Field Artillery Tactical Data | 322: Adv Fa | a Tac Data Sys/Eff Cntrl Sys |
| BA 7: Operational Systems Development | System | (AFATDS/E | CS) |

| st and Evaluation (\$ | in Millions | 5) | | FY 2 | 2011 | FY 2 Ba | | | 2012 CO | FY 2012 Total | | | |
|-----------------------|------------------------------|--|------------------------------|--------|---------------|------------|---------------|------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| | | (ATEC)/Fire Support Test Directorate (FSTD):Various Locations | | | | | | | | | | | |
| | | Subtotal | 11.247 | 3.000 | | 3.560 | | - | | 3.560 | | | |
| | | | Total Prior Years Cost | FY 2 | 2011 | FY 2 Ba | | | 2012 CO | FY 2012 Total | Cost To | Total Cost | Target Value of Contract |
| | | Project Cost Totals | 308 552 | 12 835 | | 18 039 | | _ | | 18 039 | | | |

Remarks

| PROPRIATION/BUDGET ACTIVITY 40: Research, Development, Test & Evaluation, 7: Operational Systems Development | Arm | y | | | | PE | | 037 | | | ICLA V Fie | | | ry Tacti | cal [| Data | 32 | | dv F | | | ata S | Sys/E | ≣ff C | Cntrl | Sys | ; |
|--|-----|----|-----|---|---|----|------------------|-----|---|----|---------------|---|---|----------|-------|------|----|------|------|---|----|-------|-------|-------|-------|------|---|
| | | FY | 201 | 0 | | FY | 201 ² | 1 | | FY | 2012 | 2 | | FY 201 | 3 | | FY | 2014 | 1 | | FY | 2015 | | | FY 2 | 2016 | ; |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Materiel Release V6.6 (BC 10 - Marshall) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding V6.6 (BC 10 - Marshall) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release V6.7 (BC 11 - MacArthur) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding V6.7 (BC 11 - MacArthur) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release V6.8 (BC 13 - Eisenhower) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding V6.8 (BC 13 - Eisenhower) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development and Testing V6.9 (BC 15 - Arnold) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release V6.9 (BC 15 - Arnold) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding V6.9 (BC 15 - Arnold) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development and Testing V7.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | • |
| Materiel Release V7.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | ī |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army | | | DATE: February 2011 |
|--|--|-------------|------------------------------|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | PROJECT | |
| 2040: Research, Development, Test & Evaluation, Army | PE 0203726A: Adv Field Artillery Tactical Data | 322: Adv Fa | a Tac Data Sys/Eff Cntrl Sys |
| BA 7: Operational Systems Development | System | (AFATDS/E | CS) |

Schedule Details

| | S | tart | E | ind |
|---|---------|------|---------|------|
| Events | Quarter | Year | Quarter | Year |
| Materiel Release V6.6 (BC 10 - Marshall) | 3 | 2010 | 3 | 2010 |
| Fielding V6.6 (BC 10 - Marshall) | 3 | 2010 | 4 | 2010 |
| Materiel Release V6.7 (BC 11 - MacArthur) | 1 | 2011 | 1 | 2011 |
| Fielding V6.7 (BC 11 - MacArthur) | 1 | 2011 | 2 | 2011 |
| Materiel Release V6.8 (BC 13 - Eisenhower) | 4 | 2012 | 4 | 2012 |
| Fielding V6.8 (BC 13 - Eisenhower) | 4 | 2012 | 2 | 2013 |
| Development and Testing V6.9 (BC 15 - Arnold) | 4 | 2011 | 1 | 2014 |
| Materiel Release V6.9 (BC 15 - Arnold) | 3 | 2014 | 3 | 2014 |
| Fielding V6.9 (BC 15 - Arnold) | 3 | 2014 | 1 | 2015 |
| Development and Testing V7.0 | 4 | 2013 | 2 | 2016 |
| Materiel Release V7.0 | 3 | 2016 | 3 | 2016 |

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| Exhibit R-2A, RDT&E Project Just | ification: PE | 3 2012 Army | | | | | | | DATE: Feb | ruary 2011 | |
|-----------------------------------|----------------|-------------|---------|------------|----------------------|----------------|-------------|------------------|-----------|------------|------------|
| APPROPRIATION/BUDGET ACTIV | /ITY | | | R-1 ITEM N | OMENCLAT | ΓURE | | PROJECT | | | |
| 2040: Research, Development, Test | t & Evaluation | n, Army | | PE 0203726 | 6A: <i>Adv Field</i> | d Artillery Ta | ctical Data | F19: <i>JADO</i> | CS | | |
| BA 7: Operational Systems Develop | ment | | | System | | | | | | | |
| COST (\$ in Millions) | | | FY 2012 | FY 2012 | FY 2012 | | | | | Cost To | |
| COST (\$ III WIIIIOIIS) | FY 2010 | FY 2011 | Base | oco | Total | FY 2013 | FY 2014 | FY 2015 | FY 2016 | Complete | Total Cost |
| F19: JADOCS | 11.440 | 11.787 | 11.507 | - | 11.507 | 5.726 | 5.707 | 5.733 | 5.828 | Continuing | Continuing |
| Quantity of RDT&E Articles | | | | | | | | | | | |

A. Mission Description and Budget Item Justification

Joint Automated Deep Operations Coordination System (JADOCS) is a Joint, Interagency, and Multinational (JIM) Targeting, Mission Management, and Common Operational Picture (COP) Windows-based software suite which functions as a complementary system to the Advanced Field Artillery Tactical Data System (AFATDS). JADOCS provides integration and synergy between multiple Command & Control (C2) systems of the uniformed services, and joint and combined elements involved in the targeting process and performs coordination and calculates collateral damage. JADOCS Mission Managers support this coordination amongst Warfighter functional areas to rapidly execute critical missions. JADOCS enables coordination and de-confliction of conventional and asymmetric war-fighting missions. JADOCS uses a map-oriented Graphical User Interface (GUI) and overlays as a framework for information display. JADOCS is fielded to Air Force, Navy, Marine, and Army units involved in the targeting process at Echelons Above Corps, Corps, and Division. JADOCS provides the Combatant Commands with the capability to plan and direct theater counter-fire and precision strike operations through the real time synchronization of US and Coalition assets. The application provides the Warfighter with a combination of tools, services and Mission Managers for rapid "system of systems" integration, visualization, coordination and deconfliction of critical mission information. It not only enhances Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems in the areas of strike planning but also in situational awareness, joint and combined interoperability and force transition in war. JADOCS is a component of the Integrated Fires Family of Systems (FOS) and complementary to the Army Battle Command Systems (ABCS) System of Systems (SoS). The increase in the FY12 funding of \$5.890 million is to upgrade and sustain JADOCS.

| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | | | FY 2012 | FY 2012 | FY 2012 |
|---|---------|---------|---------|---------|---------|
| | FY 2010 | FY 2011 | Base | OCO | Total |
| Title: Program Support Costs for JADOCS Software Development Efforts | 0.571 | 0.630 | 0.315 | - | 0.315 |
| Articles: | 0 | 0 | | | |
| Description: Program support for JADOCS software development efforts for versions 1.0.4.1, 1.0.5.1, 1.0.6.0, and 1.0.7.0 | | | | | |
| FY 2010 Accomplishments: Funded Program support for JADOCS software development efforts | | | | | |
| FY 2011 Plans: Continues the program support for JADOCS software development efforts | | | | | |
| FY 2012 Base Plans: | | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2012 Army | | | DATE: February 2011 |
|---|---|----------------------|---------------------|
| | R-1 ITEM NOMENCLATURE PE 0203726A: Adv Field Artillery Tactical Data System | PROJECT F19: JADO | cs |

| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) | FY 2010 | FY 2011 | FY 2012 Base | FY 2012 OCO | FY 2012 Total |
|--|------------|------------|-----------------|----------------|------------------|
| Future program support for JADOCS software development efforts | | | | | |
| Title: JADOCS Software Develop Efforts costs Articles: | 8.450 0 | 8.750 0 | 9.992 | - | 9.992 |
| Description: Complete development version 1.0.4.1, 1.0.5.1 and 1.0.6.0 Initiate development of version 1.0.7.0. | | | | | |
| FY 2010 Accomplishments: JADOCS software development efforts for version 1.0.4.1, 1.0.5.1 and 1.0.6.0 | | | | | |
| FY 2011 Plans: Complete JADOCS software development verison 1.0.5.1 and 1.0.6.0 | | | | | |
| FY 2012 Base Plans: Initiate JADOCS software version 1.0.7.0 efforts. | | | | | |
| Title: Testing Articles: | 2.087 0 | 2.407 0 | 1.200 | - | 1.200 |
| Description: Conduct and Support Test Activities | | | | | |
| FY 2010 Accomplishments: Conducted and supported JADOCS test activities. | | | | | |
| FY 2011 Plans: Continued JADOCS test activities. | | | | | |
| FY 2012 Base Plans: Future JADOCS test activities. | | | | | |
| Title: SBIR/SBTT Articles: | 0.332 0 | - | - | - | - |
| Description: Small Business Innovative Research/Small Business Technology Transfer Program | | | | | |
| FY 2010 Accomplishments: Supported Small Business Innovative Research/Small Business Technology Transfer Program | | | | | |
| Accomplishments/Planned Programs Subtotals | 11.440 | 11.787 | 11.507 | - | 11.507 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2012 Army | | | DATE: February 2011 |
|---|--|------------------|---------------------|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | PROJECT | |
| 2040: Research, Development, Test & Evaluation, Army | PE 0203726A: Adv Field Artillery Tactical Data | F19: <i>JADO</i> | CS |
| BA 7: Operational Systems Development | System | | |

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

In FY 2003, the Automated Deep Operations Coordination System (ADOCS) was renamed the Joint Automated Deep Operations Coordination System (JADOCS) and was transitioned to Product Manager, Fire Support Command and Control (FSC2).

JADOCS has operated as a graduated Advanced Concept Technology Demonstration (ACTD) program since 2005. In 2008, the Vice Chief of Staff Army approved JADOCS for Acquisition program status under the Capabilities Development for Rapid Transition (CDRT) program. Commencing in FY 10 and continuing through FY 15, the Army will provide funding for its requirements under JADOCS. The Army started development of a Capabilities Production Document in 2008 and should seek Joint Requirements Oversight Council (JROC) approval in FY2011.

JADOCS is presently fielded to U.S. Central Command (USCENTCOM), U.S. Pacific Command (USPACOM), U.S. Forces Korea (USFK) and U.S. European Command (USEUCOM), including their subordinate commands. JADOCS is distributed to over 200 servers, 2600 workstations and 4000 users worldwide. Additionally, JADOCS is fielded to coalition partners. The Republic of Korea, the United Kingdom, and North Atlantic Treaty Organization (NATO) have Foreign Military Sales (FMS) cases.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army DATE: February 2011 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0203726A: Adv Field Artillery Tactical Data F19: JADOCS BA 7: Operational Systems Development System FY 2012 FY 2012 FY 2012 Management Services (\$ in Millions) FY 2011 oco Base Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of Cost Complete Cost Category Item & Type **Activity & Location** Cost Date Cost Date Date **Total Cost** Contract Cost Cost Ft. Monmouth:Fort SIBR/STTR Various Continuing Continuing Continuing Monmouth, NJ Chenega Federal **Business/Technical Services** 0.404 Various 0.165 0.165 Continuina Continuina Continuina Systems:Various Subtotal 0.404 0.165 0.165 FY 2012 FY 2012 FY 2012 **Product Development (\$ in Millions)** FY 2011 Base oco Total **Total Prior** Contract Target Performing Years Award **Cost To** Value of Method Award Award **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Cost Date Complete **Total Cost** Contract Date Cost Raytheon Systems SS/FP Software Development & Test 8.809 Continuing Continuina Continuina Corp.: Alexandria, VA Software Development & Test TBD:TBD Continuing Continuing Various 9.992 9.992 Continuina Subtotal 8.809 9.992 9.992 FY 2012 FY 2012 FY 2012 Support (\$ in Millions) **FY 2011** Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract & Type Program Management -Fort Monmouth and Various 0.200 0.150 0.150 Continuing Continuing Continuina Government APG:NJ / MD Subtotal 0.200 0.150 0.150 FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) **FY 2011** oco Base Total Contract **Total Prior** Target Performing Cost To Value of Method Years Award Award Award **Cost Category Item Activity & Location** Cost Complete **Total Cost** & Type Cost Date Cost Date Cost Date Cost Contract Joint Service **Test Support** Various 2.374 1.200 1.200 Continuina Continuing Continuina Testing:Various Subtotal 2 374 1 200 1.200

UNCLASSIFIED

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 A | rmy | | | | | | DAT | E: Februar | y 2011 | |
|--|-----|----------|------------------------|----------------|--------------|----------------|-------|------------|--------|--|
| APPROPRIATION/BUDGET ACTIVITY | | R-1 ITEM | NOMENCLA | TURE | | PROJE | СТ | | | |
| 2040: Research, Development, Test & Evaluation, Army | | PE 02037 | 26A: <i>Adv Fiel</i> d | d Artillery Ta | actical Data | F19: <i>JA</i> | ADOCS | | | |
| BA 7: Operational Systems Development | | System | | | | | | | | |
| | | | | | | | | | , | |

| | otal Prior Years | | | FY 2012 | | 2012 | FY 2012 | Cost To | | Target Value of |
|---------------------|---------------------|--------|------|---------|---|------|---------|----------|------------|--------------------|
| | Cost | FY 2 | 2011 | Base | 0 | CO | Total | Complete | Total Cost | Contract |
| Project Cost Totals | - | 11.787 | | 11.507 | - | | 11.507 | | | |

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

FY 2010

FY 2011

FY 2012

FY 2013

FY 2014

FY 2015

FY 2016

| | | F | Y 2 | 01 | 0 | | F | Y 2 | 201 | 1 | F | Y 2 | 2012 | 2 | | FY | 20 | 13 | | | FY | 2014 | Į. | | FY | 20 | 15 | | F | Y 2 | 016 | |
|--|---|---|-----|----|---|-----|---|-----|-----|---|-------|-----|------|---|---|----|----|-----|---|---|----|------|----|---|----|-----|-----|---|---|-----|-----|---|
| | 1 | | 2 | 3 | 4 | . ' | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 3 . | 4 | 1 | 2 | 3 | 4 | 1 | 2 | : 3 | 3 4 | 1 | 1 | 2 | 3 | 4 |
| Materiel Release - McArthur | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding - McArthur | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Software Development (BC 13) Capability Set 13-14 (Eisenhower) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release - Eisenhower | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding - Eisenhower | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Software Development (BC 15) Capability Set 15-16 (Arnold) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release - Arnold | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fielding - Arnold | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Software Development (BC 17) - Capability Set 17-18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiel Release | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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PROJECT

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army PE 0203726A: Adv Field Artillery Tactical Data F19: JADOCS

BA 7: Operational Systems Development System

Schedule Details

| | St | art | Eı | nd |
|--|---------|------|---------|------|
| Events | Quarter | Year | Quarter | Year |
| Materiel Release - McArthur | 4 | 2010 | 4 | 2010 |
| Fielding - McArthur | 4 | 2010 | 2 | 2011 |
| Software Development (BC 13) Capability Set 13-14 (Eisenhower) | 3 | 2010 | 4 | 2011 |
| Materiel Release - Eisenhower | 4 | 2012 | 4 | 2012 |
| Fielding - Eisenhower | 1 | 2013 | 3 | 2013 |
| Software Development (BC 15) Capability Set 15-16 (Arnold) | 4 | 2011 | 4 | 2013 |
| Materiel Release - Arnold | 4 | 2014 | 4 | 2014 |
| Fielding - Arnold | 1 | 2015 | 3 | 2015 |
| Software Development (BC 17) - Capability Set 17-18 | 4 | 2013 | 4 | 2015 |
| Materiel Release | 4 | 2016 | 4 | 2016 |

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